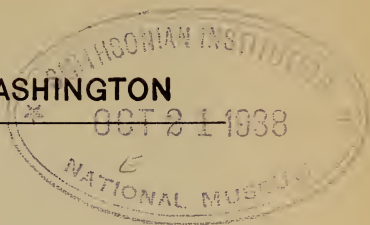


PROCEEDINGS  
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A NEW WATERDOG FROM CENTRAL LOUISIANA.<sup>1</sup>

BY PERCY VIOSCA, JR.

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Since publishing my revision of the genus *Necturus*,<sup>2</sup> much material has been gathered which will throw light on taxonomic and distributional problems of the forms occurring in the southern Gulf drainage area. While collecting life history stages during the summer of 1937, some strange larvae and juveniles from central Louisiana were taken. On a trip to the same locality during February, 1938, a juvenile larger than any of the earlier lot and six adults were taken. These proved to be a new type which seems to warrant specific recognition.

I am indebted to George H. Penn, Jr., and O. F-R. Bruce for valuable assistance rendered in the field work which brought this species to light, and to George H. Penn, Jr., for making the measurements and preparing the statistical table used in this study.

*Necturus louisianensis*, sp. nov.

*Type*.—U. S. N. M. No. 104238, a female collected in Big Creek a few miles east of Pollock, Louisiana, February 22, 1938. Total length 243 mm.; head<sup>3</sup> 42 mm. (in length 5.79); tail 74 mm. (in length 3.28); width of body 25 mm.; depth of body 18 mm. (in width of body 1.39); costal grooves 15. Head and body depressed; muzzle probe-like, rounded in outline and profile; canthus rounded; origin of upper dermal border of tail anterior to vent. Tooth formula: premaxillary, right 10, left 9; vomero-palatine, right 10, left 11; pterygoid, right 6, left 5.

Color, in formalin: above and on sides a pattern of dark brown mot-

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<sup>1</sup> A contribution from the Research Department, Southern Biological Supply Company, Inc., New Orleans, La.

<sup>2</sup> Viosca, Percy, Jr. A Tentative Revision of the Genus *Necturus* With Descriptions of Three New Species from the Southern Gulf Drainage Area. Copeia No. 2, August 18, 1937.

<sup>3</sup> The head is measured from the tip of the muzzle to the line connecting the inner bases of the upper gill insertions; the tail, from the middle of the cloaca to the tip, including the dermal border; the width of the body, at the widest point in the first third (near the fourth or fifth costal groove); the depth of the body, at the same point as the width.

tlings and reticulations inclosing lighter interspaces, the whole superimposed with black spots in about twelve more or less irregular, longitudinal rows; underparts immaculate except on sides. Two less pigmented, vermiculated areas extend along the latero-dorsal region from the snout to the end of the tail, these bordering a definitely darker, reticular, mid-dorsal region, upon which are superimposed black spots in two fairly definite longitudinal rows. The sides exhibit a brown ground inclosing irregular, more or less stellate, light blotches, upon which pattern is superimposed about five irregular rows of dark spots on either side. A dark band, distinctly visible from above, extends along the canthus and through the eye to the gills.

*Paratypes.*—In addition to the type there are 24 paratypes, all collected in Big Creek, east of Pollock, Louisiana. Eighteen (advanced larvae and young juveniles) were collected by the author and George H. Penn, Jr., on July 20, 1937, and eight, including the type (one juvenile, two mature males, and four mature females), were collected by the author and O. F-R. Bruce on the night of February 22-23, 1938.

*Summary of diagnostic characters.*—Size larger than *N. beyeri*, but considerably smaller than *N. maculosus*; a relatively slender, depressed species normally with 15 (rarely 14 or 16) costal grooves; adults 196 to 243 mm., ave. 222 mm., weight, in formalin, 56.4 grams to 65.5 grams, ave. 61.2 grams (approx. 2 oz.). Head depressed, somewhat octagonal in outline, flattened in profile, with probe-like snout and rounded canthus.

*Color, in life.*<sup>4</sup>—above and on sides, a pattern of leaf-mold brown mottlings and reticulations inclosing interspaces of umber to cocoa brown, the whole superimposed with black spots in about ten or twelve more or less irregular longitudinal rows. Normally, the black spots obliterate the ground pattern over the areas covered by them. A dark band, distinctly noticeable from above, extends from the snout through the eye to the gills. The juvenile pattern persists throughout life in the form of two less pigmented dorso-lateral areas extending from the snout to the end of the tail.

In the ground pattern of the mid-dorsal region, the leaf-mold brown appears for the most part as rather definite reticulations inclosing umber interspaces. The superimposed black spots are close together in this area and arranged in two fairly definite rows. In the latero-dorsal regions, the leaf-mold brown tends to form delicate vermiculations, more or less longitudinally arranged, and here the light pattern of umber predominates. Black spots from the sides and mid-dorsal regions encroach on these areas and may even occasionally be isolated in them. On the sides, the leaf-mold brown predominates, the umber appearing only as irregular, more or less stellate, blotches. Black spots are present in about four to five more or less irregular rows on either side. The underparts are dirty white tinged with pinkish, especially in the regions of the throat, axilla and groin. The dorsal pattern encroaches on the edges of the belly as a spotted and mottled zone with an irregular margin.

The dark spots vary between 126 and 177 (ave. 148) for the adult series;

<sup>4</sup> These notes were made while the specimens were under chloretone narcotization.



*Necturus louisianensis*, upper surfaces of larva, juvenile and adult female,  
reduced approximately one-third.  
(Natural size of the adult was 243 mm.)

